

A SHORT NOTE ON *COMBRETUM EDWARDSII* EXELL

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ABSTRACT

Combretum edwardsii is a liane with interxylary phloem in the secondary xylem. *C. edwardsii* was described by Exell (1968) from sterile material. The type specimen was collected by D. Edwards. Fertile material collected by H. P. van der Schijff is described.

UITTREKSEL

KORT AANTEKENINGE OOR *COMBRETUM EDWARDSII* EXELL

Combretum edwardsii is 'n liaan met interxilêre floëem in die sekondêre xileem. *C. edwardsii* is deur Exell (1968) van steriele materiaal beskryf. Die tipe monster is deur D. Edwards versamel. Fertiele materiaal versamel deur H. P. van der Schijff word beskryf.

Combretum edwardsii is a woody climber with stalked elliptical opposite leaves. Brown scales are conspicuous on the leaves and both the petioles and young stems are covered with unicellular combretum hairs.

The leaves are bifacial with anomocytic stomata in the abaxial epidermis only. The scales are about 90–100 μm in diameter and the head consists of 9 to 14 marginal cells. The total number of cells of the head varies from 14 to 25 (Fig. 1A). In a longitudinal section the scale consists of a stalk of four cells and a flat multicellular uniseriate head (Fig. 1B).

The anatomy of the stem and root is the same as the general structure of the family Combretaceae with interxylary phloem in the secondary xylem. In the

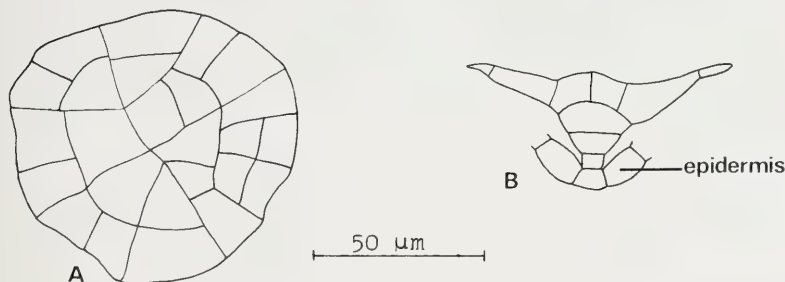


FIG. 1.
Scale of *Combretum edwardsii*. A. Surface view; B. Longitudinal section.

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other three climbers, viz. *C. bracteosum* (Hochst.) Brandis, *C. microphyllum* Klotzsch, and *C. mossambicense* (Kl.) Engl., interxylary phloem is absent. Of all the South African species *Combretum edwardsii* is therefore the only climber with interxylary phloem. The latter three species are also the only South African representatives with stalked glands on the leaves (Verhoeven & Van der Schijff, 1973).

C. edwardsii Exell was described by Exell (1968) from sterile material in the hope that fertile material would be collected at a later stage. The type specimen was collected by D. Edwards (*Edwards 3147*, PRE, holotype). Unfortunately the collecting date was not given.

Material of *C. edwardsii* was collected by R. L. Verhoeven on 6th December, 1968 in Natal, District Impendle about 64 kilometres from Pietermaritzburg on the road to Bulwer. From this material the anatomy of the plant was studied. The species is a definite climber and occurs abundantly in the area.

The first fertile material and so far the only known, was collected by H. P. van der Schijff at Mariepskop in the Eastern Transvaal on the 25th October, 1962. The specimen, viz. *Van der Schijff 6273*, was wrongly identified as *Quisqualis parviflora* Gerr. and was only recently rediscovered and correctly identified as *Combretum edwardsii* Exell.

At Mariepskop it grows as a robust liane with a basal stem diameter of up to 20 cm thick, in dense indigenous mountain forest. It tops the tree stratum and the cream-coloured inflorescences are found in open sunlight on the forest canopy—probably the main reason why fertile material was not collected at an earlier stage.

Inflorescence a spike 3 to 4 cm long; Sepals 4 (3,5 mm); Petals 4 (1,5 mm); Stamens 8 (7–8 mm); Pistil 8,5 to 9,5 mm; Style 5,5 to 6 mm. The unilocular inferior ovary bears at its top a short floral tube. At the top of the floral tube are four sepals. Alternating with the sepals are four petals. The eight stamens are inserted on the floral tube. Interior to the bases of the filaments the floral tube is developed into a lobed hairy disk.

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